SEQUENCE LISTING

<110> RIKEN

<120> Fluorescent indicator using FRET

<130> A31676A

<160> 45

<210> 1

<211> 26

<212> PRT

<213> animal

<400> 1

```
Lys Arg Arg Trp Lys Lys Asn Phe Ile Ala Val Ser Ala Ala Asn Arg
 1               5                  10                  15
Phe Lys Lys Ile Ser Ser Ser Gly Ala Leu
            20                  25
```

<210> 2

<211> 20

<212> PRT

<213> animal

<400> 2

```
Ala Arg Arg Lys Trp Gln Lys Thr Gly His Ala Val Arg Ala Ile Gly
 1               5                  10                  15
Arg Leu Ser Ser
            20
```

<210> 3

<211> 20

<212> PRT

<213> animal

<400> 3

Ala Arg Arg Lys Leu Lys Gly Ala Ile Leu Thr Thr Met Leu Ala Thr
   1   5   10   15

Arg Asn Phe Ser
          20

<210> 4

<211> 17

<212> PRT

<213> animal

<400> 4

Gly Val Arg Asn Ile Lys Ser Met Trp Glu Lys Gly Asn Val Phe Ser
   1   5   10   15

Ser

<210> 5

<211> 20

<212> PRT

<213> animal

<400> 5

Ala Arg Arg Lys Leu Lys Ala Ala Val Lys Ala Val Val Ala Ser Ser
   1   5   10   15

Arg Leu Gly Ser
          20

<210> 6

<211> 26

<212> PRT

<213> animal

<400> 6

Phe Met Asn Asn Trp Glu Val Tyr Lys Leu Leu Ala His Ile Arg Pro
1   5   10   15
Pro Ala Pro Lys Ser Gly Ser Tyr Thr Val
                20   25

<210> 7

<211> 24

<212> PRT

<213> animal

<400> 7

Ala Arg Lys Glu Val Ile Arg Asn Lys Ile Arg Ala Ile Gly Lys Met
1   5   10   15
Ala Arg Val Phe Ser Val Leu Arg
                20

<210> 8

<211> 26

<212> PRT

<213> animal

<400> 8

Leu Arg Arg Leu Ile Asp Ala Tyr Ala Phe Arg Ile Tyr Gly His Trp
1   5   10   15
Val Lys Lys Gly Gln Gln Gln Asn Arg Gly
                20   25

<210> 9

<211> 27

<212> PRT

<213> animal

<400> 9

Arg Gly Lys Phe Lys Val Ile Cys Leu Thr Val Leu Ala Ser Val Arg

    1   5   10   15

Ile Tyr Tyr Gln Tyr Arg Arg Val Lys Pro Gly

            20   25

<210> 10

<211> 28

<212> PRT

<213> animal

<400> 10

Leu Arg Arg Gly Gln Ile Leu Trp Phe Arg Gly Leu Asn Arg Ile Gln

    1   5   10   15

Thr Gln Ile Lys Val Val Asn Ala Phe Ser Ser Ser

            20   25

<210> 11

<211> 21

<212> PRT

<213> animal

<400> 11

Arg Arg Lys His Leu Gln Arg Pro Ile Phe Arg Leu Arg Cys Leu Val

    1   5   10   15

Lys Gln Leu Glu Lys

            20

<210> 12

<211> 21

<212> PRT

<213> animal

<400> 12

Thr Glu Lys Met Trp Gln Arg Leu Lys Gly Ile Leu Arg Cys Leu Val
1   5   10   15

Lys Gln Leu Glu Lys
                20

<210> 13
<211> 23
<212> PRT
<213> animal
<400> 13

Lys Arg Arg Ala Ile Gly Phe Lys Lys Leu Ala Glu Ala Val Lys Phe
1   5   10   15

Ser Ala Lys Leu Met Gly Gln
                20

<210> 14
<211> 28
<212> PRT
<213> animal
<400> 14

Ile Lys Pro Ala Lys Arg Met Lys Phe Lys Thr Val Cys Tyr Leu Leu
1   5   10   15

Val Gln Leu Met His Cys Arg Lys Met Phe Lys Ala
                20   25

<210> 15
<211> 22
<212> PRT
<213> animal
<400> 15

Ala Cys Ile Asp Leu Leu Trp Lys Ile Ala Arg Ala Gly Ala Arg Ser
1   5   10   15
Ala Val Gly Thr Glu Ala
                20

<210> 16
<211> 27
<212> PRT
<213> animal
<400> 16
Lys Ala His Lys Ala Ala Thr Lys Ile Gln Ala Ser Phe Arg Gly His
1   5   10   15
Ile Thr Arg Lys Lys Leu Lys Gly Glu Lys Lys
                20   25

<210> 17
<211> 24
<212> PRT
<213> animal
<400> 17
Lys Thr Ala Ser Pro Trp Lys Ser Ala Arg Leu Met Val His Thr Val
1   5   10   15
Ala Thr Phe Asn Ser Ile Lys Glu
                20

<210> 18
<211> 25
<212> PRT
<213> animal
<400> 18

Lys Lys Lys Lys Lys Arg Phe Ser Phe Lys Lys Ser Phe Lys Leu Ser
    1   5   10   15
Gly Phe Ser Phe Lys Lys Ser Lys Lys
                20   25

<210> 19
<211> 24
<212> PRT
<213> animal
<400> 19

Lys Lys Lys Lys Lys Phe Ser Phe Lys Lys Pro Phe Lys Leu Ser Gly
    1   5   10   15
Leu Ser Phe Lys Arg Asn Arg Lys
                20

<210> 20
<211> 31
<212> PRT
<213> animal
<400> 20

Lys Gln Gln Lys Glu Lys Thr Arg Trp Leu Asn Thr Pro Asn Thr Tyr
    1   5   10   15
Leu Arg Val Asn Val Ala Asp Glu Val Gln Arg Asn Met Gly Ser
                20   25   30

<210> 21
<211> 21
<212> PRT
<213> animal
<400> 21

Lys Asp Gln Val Ala Asn Ser Ala Phe Gln Glu Arg Leu Arg Lys His

1   5   10   15

Gly Leu Glu Val Ile

            20

<210> 22

<211> 21

<212> PRT

<213> animal

<400> 22

Tyr His Arg Leu Arg Asp Leu Leu Leu Ile Val Lys Arg Ile Val Glu

1   5   10   15

Leu Leu Gly Arg Arg

            20

<210> 23

<211> 23

<212> PRT

<213> animal

<400> 23

Gln Gln Leu Ala Thr Leu Ile Gln Lys Thr Tyr Arg Gly Trp Arg Cys

1   5   10   15

Arg Thr His Tyr Gln Leu Met

            20

<210> 24

<211> 24

<212> PRT

<213> animal

<400> 24

Arg Ala Ala Cys Ile Arg Ile Gln Lys Thr Ile Arg Gly Trp Leu Leu

   1   5   10   15

Arg Lys Arg Tyr Leu Cys Met Gln

          20

<210> 25

<211> 12

<212> PRT

<213> animal

<400> 25

Ile Asn Leu Lys Ala Ala Leu Ala Lys Lys Ile Leu

   1   5   10

<210> 26

<211> 26

<212> PRT

<213> animal

<400> 26

Gly Ile Gly Ala Val Leu Lys Val Leu Thr Thr Gly Leu Pro Ala Leu

   1   5   10   15

Ile Ser Trp Ile Lys Arg Lys Arg Gln Gln

          20   25

<210> 27

<211> 30

<212> PRT

<213> animal

<400> 27

His Ser Gln Gly Thr Phe Thr Thr Ser Asp Tyr Ser Lys Tyr Leu Asp

   1   5   10   15

Ser Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
                20   25   30

<210> 28

<211> 27

<212> PRT

<213> animal

<400> 28

His Ser Asp Gly Thr Phe Thr Ser Glu Leu Ser Arg Leu Arg Asp Ser
    1   5   10   15

Ala Arg Leu Gln Arg Leu Leu Gln Gly Leu Val
                20   25

<210> 29

<211> 28

<212> PRT

<213> animal

<400> 29

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
    1   5   10   15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
                20   25

<210> 30

<211> 33

<212> PRT

<213> animal

<400> 20

Tyr Ala Asp Gly Thr Phe Ile Ser Asp Tyr Ser Ala Ile Met Asn Lys
    1   5   10   15

Ile Arg Gln Gln Asp Phe Val Asn Trp Leu Leu Ala Gln Gln Gln Lys
                    20   25   30

Ser

<210> 31

<211> 17

<212> PRT

<213> animal

<400> 31

Lys Leu Trp Lys Lys Leu Leu Lys Leu Leu Lys Lys Leu Leu Lys Leu
    1   5   10   15

Gly

<210> 32

<211> 5

<212> PRT

<213> eucaryotic cell

<400> 32

Lys Lys Lys Arg Lys
                    5

<210> 33

<211> 26

<212> PRT

<213> eucaryotic cell

<400> 33

Met Leu Arg Thr Ser Ser Leu Phe Thr Arg Arg Val Gln Pro Ser Leu
    1   5   10   15

Phe Arg Asn Ile Leu Arg Leu Gln Ser Thr
                    20   25

<210> 34

<211> 4

<212> PRT

<213> eucaryotic cell

<400> 34

Lys Asp Glu Leu

<210> 35

<211> 3

<212> PRT

<213> eucaryotic cell

<400> 35

Ser Lys Phe

<210> 36

<211> 4

<212> PRT

<213> eucaryotic cell

<220>

<221> unsure

<222> 4

<223> unknown

<400> 36

Cys Ala Ala Xaa

<210> 37

<211> 2

<212> PRT

<213> eucaryotic cell

<400> 37

Cys Cys

<210> 38

<211> 3

<212> PRT

<213> eucaryotic cell

<220>

<221> unsure

<222> 2

<223> unknown

<400> 38

Cys Xaa Cys

<210> 39

<211> 4

<212> PRT

<213> eucaryotic cell

<220>

<221> unsure

<222> 3

<223> unknown

<220>

<221> unsure

<222> 4

<223> unknown

<400> 39

Cys Cys Xaa Xaa

<210> 40

<211> 29

<210> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<400> 40

attggatccc atggtgagca agggcgagg   29

<210> 41

<211> 28

<212> DNA

<213> Artificial Sequence

<220> .

<223> Description of Artificial Sequence: Synthetic DNA

<400> 41

catgcatgcg ggcggcggtc acgaactc   28

<210> 42

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<400> 42

gctggtacca tggtgagcaa gggcgagg   28

<210> 43

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<400> 43

gcagaattct cacttgtaca gctcgtccat gcc   33

<210> 44

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<400> 44

attggatccc atggtgagca agggcgagg   29

<210> 45

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<400> 45

gctggtacca tcgacctcat cagtgatccc ggcggcggtc acgaa   45